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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/593,924 | 09/21/2006 | Vladimir Andreevic Paramonov | NOTAR-040US | 5868 |
| 7663 7590 06/11/2008 STETINA BRUNDA GARRED & BRUCKER 75 ENTERPRISE, SUITE 250 ALISO VIEJO, CA 92656 | | | | |
| EXAMINER | | | | |
| WONG, EDNA | | | | |
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| 1795 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/593,924

Applicant(s)

PARAMONOV ET AL.

Examiner

EDNA WONG

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

This is in response to the Amendment dated April 15, 2008. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Response to Arguments

Specification

The disclosure has been objected to because of minor informalities.

The objection of the disclosure has been withdrawn in view of Applicants' amendment.

Claim Objections

Claims **1, 3 and 8** have been objected to because of minor informalities.

The objection of claims 1, 3 and 8 has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 112

I. Claims **1-9** have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 1-9 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

II. Claims **3-9** have been rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the method steps for electroplating.

The rejection of claims 3-9 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 102/103

I. Claim **9** has been rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **RU 2,103,418** ('418).

The rejection of claim 9 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over RU 2,103,418 ('418) has been withdrawn in view of Applicants' amendment. Claim 9 has been cancelled.

II. Claim **9** has been rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Yoshihara et al.** (US Patent No. 3,997,301).

The rejection of claim 9 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yoshihara et al. has been withdrawn in view of Applicants' amendment. Claim 9 has been cancelled.

III. Claim 9 has been rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Ichiba et al.** (US Patent No. 5,871,631).

The rejection of claim 9 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ichiba et al. has been withdrawn in view of Applicants' amendment. Claim 9 has been cancelled.

Claim Rejections - 35 USC § 103

I. Claims 1 and 2 have been rejected under 35 U.S.C. 103(a) as being unpatentable over **RU 2,103,418** ('418) in combination with **Brown et al.** (US Patent No. 6,322,686 B1) and **Kalinin** ("Improvement of Lubricity of Water-Containing Fluid Based on Proxamine 385", *Ivanovo Chemical Technology Institute. Translated from Khimiya Tekhnologiya Topliv I Masel*, No. 11, pp. 27-28, November, 1986, pp. 598-600).

With regards to claim 2, the rejection under 35 U.S.C. 103(a) as being unpatentable over RU 2,103,418 ('418) in combination with Brown et al. and Kalinin has been withdrawn in view of Applicants' amendment. Claim 2 has been cancelled.

With regards to claim 1, the rejection under 35 U.S.C. 103(a) as being unpatentable over RU 2,103,418 ('418) in combination with Brown et al. and Kalinin is as applied in the Office Action dated December 10, 2007 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that it is noted that the RU '418 reference does not teach or

suggest providing tin in the form of tin sulfamate, as claimed. While RU '418 teaches that the tin is in the form of bivalent ions, the reference does not teach or suggest that such ions correspond to the claimed sulfamate form.

In particular, the Examiner has not provided any reasoning for why one of ordinary skill in the art would have been motivated to provide the particular form of tin that is *tin sulfamate* as a part of an electroplating composition, based on the teachings of any of the RU '418, Brown or Kalinin references.

In response, RU '418 teaches tin in the form of bivalent ions and sulphamic acid (abstract).

The sulphamic acid would have dissociated into sulphamate ions in the electrolyte. Can Applicants say that the sulphamate ions would not have combined with the bivalent tin ions to form tin sulfamate, and would have not been present in any degree in the electrolyte?

Brown is used in the Examiner's rejection for the teaching of conventional concentrations of tin compound in the electrodepositing of tin (col. 3, lines 33-49).

Kalinin is used in the Examiner's rejection for the teaching of the molecular weight of proxamine-385.

Applicants state that RU '418 does not teach or suggest providing the block copolymer having the molecular weight of 3950 to 6450 and ratio of ethylene oxide to propylene oxide of 1.4-1.2:1.0 as claimed.

It is noted that proxamine-385 is a copolymer having a molecular weight of 7600 (see, e.g., paragraph [0039] of instant specification), and thus is substantially larger than the copolymer as claimed.

In response, claim 1, lines 8-11, recite:

"said copolymer having a molecular weight of 3950 to 6450 and number of ethylene oxide links-to-number of propylene oxide links ratio of 1.4-1.2:1.0, ***at initial buildup of required number of links from propylene oxide followed by oxyethylation.***"

Are the molecular weight and number of ethylene oxide links-to-number of propylene oxide links as presently claimed the initial buildup properties or the final required properties of the copolymer?

Since the claim reads on that said copolymer having a molecular weight of 3950 to 6450 and number of ethylene oxide links-to-number of propylene oxide links ratio of 1.4-1.2:1.0 are initial buildup properties, then the final copolymer reads on copolymer that can have a molecular weight greater than 6450 and a number of ethylene oxide links-to-number of propylene oxide links ratio greater than 1.4-1.2:1.0.

Applicants state that the composition containing the copolymer of the instant invention unexpectedly provides improved high quality electroplating coatings, controls foam formation and provides other benefits in electroplating that are not taught or suggested by the RU '418 reference (see, e.g., paragraphs [0011]-[0016].)

In response, the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It

is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by the Applicants. *In re Linter* 458 F.2d 1013, 173 USPQ 560 (CCPA 1972); *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), *cert. denied*, 500 US 904 (1991); and MPEP § 2144.

Applicants state that Kalinin is directed to the use of the same proxamine-385 polymer described in the RU '418 reference for the purposes of improving the lubricity of water-containing formulations with propanol to provide antiwear and antifriction properties in machinery construction (*see, e.g.*, second through fourth paragraphs), and thus is directed to non-analogous art.

In response, Kalinin is used in the Examiner's rejection for the teaching of the molecular weight of proxamine-385.

Applicants state that Kalinin does not teach the use of proxamine-385 or any other block co-polymers for electroplating and/or electroplating purposes, and thus also does not teach or suggest the unexpectedly good results that are provided by the block copolymers of the instant invention.

In response, the rejection is not overcome by pointing out that one reference does not contain a particular limitation when reliance for that teaching is on another reference. *In re Lyons* 150 USPQ 741 (CCPA 1966). Moreover, it is well settled that one cannot show nonobviousness by attacking the references individually where, as here,

the rejection is based on a combination of references. *In re Keller* 208 USPQ 871 (CCPA 1981); *In re Young* 159 USPQ 725 (CCPA 1968).

Applicants state that the references do not teach or suggest the composition for electroplating having the pH that is within the claimed range of from 0.6 to 1.1, as in claim 1.

In response, the electrolyte disclosed by RU '418 inherently has a pH. Although not disclosed, if the composition is physically the same, it must have the same properties. Products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable (MPEP § 2112.01(II)).

Applicants state that Brown and Kalinin do not make up for the deficiencies of RU '418 with regards to the pH level.

In response, Brown is used in the Examiner's rejection for the teaching of conventional concentrations of tin compound in the electrodepositing of tin (col. 3, lines 33-49).

Kalinin is used in the Examiner's rejection for the teaching of the molecular weight of proxamine-385.

II. Claims 3-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable

over **RU 2,103,418** ('418) in combination with **Brown et al.** (US Patent No. 6,322,686 B1) and **Kalinin** ("Improvement of Lubricity of Water-Containing Fluid Based on Proxamine 385", *Ivanovo Chemical Technology Institute. Translated from Khimiya Tekhnologiiya Topliv I Masel*, No. 11, pp. 27-28, November, 1986, pp. 598-600) as applied to claims 1 and 2 above, and further in view of **Ichiba et al.** (US Patent No. 5,871,631).

The rejection of claims 3-8 under 35 U.S.C. 103(a) as being unpatentable over RU 2,103,418 ('418) in combination with Brown et al. and Kalinin as applied to claims 1 and 2 above, and further in view of Ichiba et al. is as applied in the Office Action dated December 10, 2007 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that Ichiba does not teach or suggest providing a composition having the block copolymer as claimed, tin in the form of tin sulfamate, or the benefits of such a composition having the pH as claimed, and furthermore does not teach or suggest the unexpectedly good results provided by the claimed invention.

In response, the rejection is not overcome by pointing out that one reference does not contain a particular limitation when reliance for that teaching is on another reference. *In re Lyons* 150 USPQ 741 (CCPA 1966). Moreover, it is well settled that one cannot show nonobviousness by attacking the references individually where, as here, the rejection is based on a combination of references. *In re Keller* 208 USPQ 871 (CCPA 1981); *In re Young* 159 USPQ 725 (CCPA 1968).

A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use, see *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

Response to Amendment

Claim Rejections - 35 USC § 112

Claims **1** and **3-8** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1

lines 8-11, recite "said copolymer having a molecular weight of 3950 to 6450 and number of ethylene oxide links-to-number of propylene oxide links ratio of 1.4-1.2:1.0, at initial buildup of required number of links from propylene oxide followed by oxyethylation."

The claim language is unclear as to whether the molecular weight of 3950 to 6450 and number of ethylene oxide links-to-number of propylene oxide links ratio of 1.4-1.2:1.0 is the initial buildup properties or the final required properties of the copolymer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDNA WONG whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edna Wong/
Primary Examiner
Art Unit 1795

EW
June 8, 2008